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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,980

02/09/2007

Isao Kurihara

Q97121

2887

23373 7590 04/27/2009
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EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

04/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,980	Applicant(s) KURIHARA ET AL.	
	Examiner Ellen M. McAvoy	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>15 Sept 2006; 18 Feb 2009</u> . | 6) <input type="checkbox"/> Other: ____. |

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5,965,495) in combination with Katafuchi (6,962,614) and Nakazato et al (6,569,818)

Goto et al ["Goto"] disclose lubricating oil compositions for internal combustion engines, preferably diesel engines, which have a low ash content and which does not show adverse effects on the performance of apparatuses for exhaust gas treatments such as particulate material traps. The compositions comprise a base oil of lubricating viscosity and, as additives, (a) an ashless dispersant containing boron, (b) a metallic detergent including sulfonates, phenates and salicylates of alkali and alkaline earth metals, and, optionally, (c) esters of aromatic carboxylic acids having a hydroxyl group. The compositions have a ratio [B]/[M] of a content of boron [B] in the composition in % by weight to a total content of metals [M] derived from the detergent in the composition in % by weight of not less than 0.15, and a sulfated ash content in the composition of not more than 1.5% by weight, preferably not more than 1.2% by weight. See column 1, line 45 to column 2, line 12, and column 7. Goto allows for the addition of other lubricant additives to the compositions including zinc dialkyldithiophosphates as anti-wear agents. See column 7, lines 46-67. Thus the examiner is of the position that the lubricating oil compositions set forth in Goto appear to meet the limitations of the claimed compositions. Applicants' open-ended claim language "comprising" allows for the addition of other additives

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to the composition such as the esters of aromatic carboxylic acids having a hydroxyl group of Goto. Applicants' invention differs by specifying that the diesel engine is equipped with a regenerative DPF. However, Katafuchi is added to teach that diesel engines having regenerative diesel particulate filter (DPF) are known in the art. Applicants' claimed invention also differs by specifying that the diesel engine is run on a diesel fuel having not more than 10 mass ppm sulfur. However, as evidenced by Nakazato et al ["Nakazato"], it is conventional in the art to use low sulfur diesel fuels (sulfur content of 0.01 weight % or less) in diesel engine-mounted vehicles to which exhaust gas-cleaning devices containing particulate filters are attached.

Claim Rejections - 35 USC § 103

Claims 1-8 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Ogano et al (6,638,897) in combination with Katafuchi (6,962,614) and Nakazato et al (6,569,818).

Ogano et al ["Ogano"] disclose low-phosphorus and low-ash lubricating oil compositions for internal combustion engines, in particular diesel engines which are equipped with a filtration system such as a diesel particulate filter (DPF). See column 1, line 8 to column 2, line 49. The compositions comprise a base oil composed of a mineral oil, a synthetic oil or mixtures thereof; and, as additives, (a) an overbased calcium salicylate, and (b) ashless dispersant such as a boron-containing succinimide. Ogano teaches that component A is incorporated at 0.10 to 0.90 weight % as calcium, based on the whole composition, preferably 0.5 to 0.9 weight %. Ogano teaches that the lubricating oil compositions contain boron at 0.04 weight % or less, based on the whole composition. See column 4, line 33 to column 5, line 44. Ogano allows for the addition of other lubricant additives to the compositions including zinc dialkyldithiophosphates as anti-wear

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agents. See column 6, lines 45 to column 7, line 35. Thus the examiner is of the position that the lubricating oil compositions set forth in Ogano appears to meet the limitations of the claimed compositions. Applicants' open-ended claim language "comprising" allows for the addition of other additives to the composition such as the other additives disclosed in Ogano. Applicants' invention differs by specifying that the diesel engine is equipped with a regenerative DPF. However, Katafuchi is added to teach that diesel engines having regenerative diesel particulate filter (DPF) are known in the art. Applicants' claimed invention also differs by specifying that the diesel engine is run on a diesel fuel having not more than 10 mass ppm sulfur. However, as evidenced by Nakazato et al ["Nakazato"], it is conventional in the art to use low sulfur diesel fuels (sulfur content of 0.01 weight % or less) in diesel engine-mounted vehicles to which exhaust gas-cleaning devices containing particulate filters are attached.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/
Primary Examiner
Art Unit 1797

EMcAvoy
April 24, 2009